

## PEA306:ANALYTICAL SKILLS-II

L:2 T:1 P:0 Credits:3

**Course Outcomes:** Through this course students should be able to

CO1 :: use the concepts learned in ratio and LCM to solve the problems related to time & work , pipes & cisterns

CO2 :: determine the techniques of time speed & distance to solve the problems on trains and boats & stream

CO3 :: apply the concepts learnt to solve the questions related to venn diagrams

CO4 :: apply the concepts learnt to solve the problems based on clocks, calendar and mensuration

CO5 :: apply the analytical reasoning concepts learnt to solve linear and circular seating arrangement based problems

CO6 :: analyze the data to interpret and solve the given problems

### Unit I

**Time and Work** : problems based on time and work, formulae, computation of work done together, efficiency based problems, men, women, and children based problems, wages based work problems

**Pipes and Cisterns** : inlet-outlet, part of tank filled, time based problems

### Unit II

**Time, speed and distance** : concept of time, speed and distance, conversion of units and proportionality, average speed concept

**Problem on trains** : relative speed concept & application

**Boats and Streams** : downstream and upstream

### Unit III

**Syllogism** : logical venn diagrams, ability to relate a certain given group diagrammatically, Possibility based questions

**Arithmetical reasoning** : venn diagrams based problems

**Number ranking test** : number test and ranking test problems

### Unit IV

**Mensuration** : problems on surface area and volume of cube, cuboid, problems on surface area and volume of sphere and hemisphere, problems on surface area and volume of cone and cylinder

**Calendar** : basic concept of calendar, date and days, finding the exact day

**Clocks** : concept of clock, facts and formulae, practice problems

### Unit V

**Height and distance** : problem based on height and distance

**Analytical Reasoning** : Linear seating arrangement, circular seating arrangement, puzzle test

**Cubes and Dices** : basic 3-D structure of a cube., evaluation of Cube with 'n' sides painted, numbers on a die, classification of dice, constructed and deconstructed dice

### Unit VI

**Data interpretation** : basics of data interpretation and its types, tabulation, bar graph, pie chart, and line graph

**Data sufficiency** : check sufficiency of data

### Text Books:

1. ANALYTICAL SKILLS - II by S.CHAND EXPERTS, S Chand Publishing

### References:

1. ANALYTICAL REASONING by MK PANDAY, BANKING SERVICE CHRONICLE
2. MAGICAL BOOK ON QUICKER MATHS by M.TYRA, BANKING SERVICE CHRONICLE

